

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 04-263086

(43)Date of publication of application : 18.09.1992

(51)Int.Cl. C23F 1/24
C23F 1/00

(21)Application number : 03-023091 (71)Applicant : MITSUBISHI ELECTRIC CORP

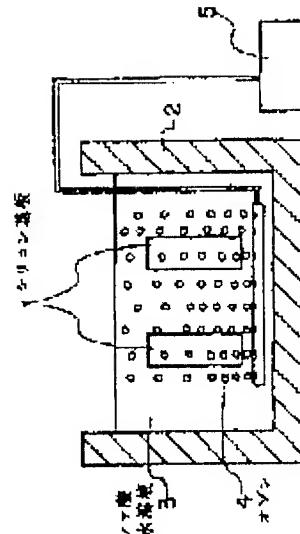
(22)Date of filing : 18.02.1991 (72)Inventor : KUSAKABE KENJI
YAMAUCHI KEIJI

(54) METHOD FOR ETCHING SILICON SUBSTRATE

(57)Abstract:

PURPOSE: To etch the surface of a silicon substrate without generating a harmful gas by dipping the substrate in an aq. hydrofluoric acid soln. bubbled with ozone.

CONSTITUTION: The surface of a silicon substrate 1 is etched to remove a mechanically strained layer and contaminants. In this case, an aq. hydrofluoric acid soln. 3 having 1% concn., for example, is charged into an etching tank 2 and heated to about 25°C, the bubbles 4 of the ozone from a ozone bubbler 5 are formed in the soln. 3, and the substrate 1 is dipped in the soln. Consequently, harmful NO₂ gas is not generated as in the conventional case where an aq. hydrofluoric acid-nitric acid soln. is used, when the substrate 1 is etched.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or

[application converted registration]
[Date of final disposal for application]
[Patent number]
[Date of registration]
[Number of appeal against examiner's
decision of rejection]
[Date of requesting appeal against examiner's
decision of rejection]
[Date of extinction of right]